

### AMENDMENTS TO THE CLAIMS

As set forth below, please amend claims 1, 7, 12, 14, and 17-20; cancel claims 10, 15, 16, 21, 23, and 24; and add new claims 27-28:

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1. (Currently Amended) A method of identifying genetically modified mammalian cells expressing a mutated muscle specific tyrosine kinase receptor (mMuSK-R), comprising the steps of:
- E*
- a) introducing a nucleic acid sequence encoding a mMuSK-R ~~mutated muscle specific tyrosine kinase receptor (mMuSK-R)~~ operatively linked to a promoter into a mammalian cells ~~cell~~ to form a genetically modified cell ~~cells~~;
  - b) allowing expression of the mMuSK-R in the genetically modified cell ~~cells~~; and
  - c) identifying the cells expressing the mMuSK-R.
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2. (Previously Amended) The method according to claim 1 wherein the mMuSK-R is a mutated form of the amino acid sequence set forth in SEQ ID NO:2.
3. (Original) The method according to claim 1, wherein the mMuSK-R is a sequence having at least 150 amino acids deleted from the intracellular domain of a MuSK-R.
4. (Original) The method according to claim 1, wherein the mMuSK-R is a MuSK-R sequence having the kinase catalytic site deleted.
5. (Previously Amended) The method according to claim 3, wherein the mMuSK-R comprises SEQ ID NO:2 wherein amino acids 538-869 or 577-869 are deleted.
6. (Original) The method according to claim 1, wherein the identifying step is accomplished by contacting the genetically modified cells with an antibody.

E2 7. (Currently Amended) The method according to claim 1, wherein the nucleic acid sequence encoding the mMuSK-R is introduced into the mammalian cells ~~cell~~ by a vector.

8. (Original) The method according to claim 6, wherein the vector is a retroviral vector.

9. (Original) The method according to claim 1, wherein the mammalian cells are hematopoietic cells.

10. (Cancelled)

11. (Original) The method according to claim 1, further comprising the step of separating the identified cells expressing the mMuSK-R.

E3 12. (Currently Amended) The method according to claim 1, wherein the identifying step comprises separating ~~separates~~ the genetically modified cells from ~~the~~ non-modified cells.

13. (Cancelled)

14. (Currently Amended) A method of identifying genetically modified human hematopoietic cells expressing a muscle specific tyrosine kinase receptor (MuSK-R), comprising the steps of:

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- a) introducing a nucleic acid sequence encoding a MuSK-R ~~muscle-specific tyrosine kinase receptor (MuSK-R)~~ into a human hematopoietic ~~cell~~ cells;
  - b) allowing expression of the MuSK-R in said cells; and
  - c) identifying the genetically modified hematopoietic cells ~~from the non-modified hematopoietic cells~~ expressing the MuSK-R.

15-16. (Cancelled)

17. (Currently Amended) A method for the immunoselection of transduced mammalian cells expressing a mutated muscle specific tyrosine kinase receptor (mMuSK-R), comprising the steps of:

- a) transducing cells with a nucleic acid sequence encoding a mMuSK-R; ~~mutated muscle specific tyrosine kinase receptor (mMuSK-R)~~;
- b) incubating the cells with an antibody which recognizes and binds specifically to the mMuSK-R; and
- c) identifying the bound transduced cells.

18. (Currently Amended) The method according to claim 17 46, wherein the cells are transduced by a retroviral vector derived from ~~the group consisting of~~ moloney murine leukemia virus (MoMLV), ~~myeloproliferative sarcoma virus (MPSV), murine embryonic stem cell virus (MESV), murine stem cell virus (MSCV) and spleen focus forming virus (SFFV).~~

19. (Currently Amended) The method according to claim 17 46, further comprising separating the identified bound transduced cells from non-bound cells.

20. (Currently Amended) The method according to claim 17 46, further comprising expanding the bound transduced cells.

21-24. (Cancelled)

25. (Previously Added) The method according to claim 1, wherein the mMuSK-R is a polypeptide having at least 300 amino acid residues deleted from the cytoplasmic domain of the MuSK-R set forth as SEQ ID NO:2.

26. (Previously Added) The method according to claim 25, wherein the mMuSK-R is a polypeptide having at least amino acid residues 577-869 deleted from the MuSK-R set forth as SEQ ID NO:2.

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27. (New) The method according to claim 17, wherein the mMuSK-R is a polypeptide having at least 300 amino acid residues deleted from the cytoplasmic domain of the MuSK-R set forth as SEQ ID NO:2.

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28. (New) The method according to claim 27, wherein the mMuSK-R is a polypeptide having at least amino acid residues 577-869 deleted from the MuSK-R set forth as SEQ ID NO:2.

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